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PATENT #

IN THE U.S. PATENT AND TRADEMARK OFFICE

Applicant: David D. Huo et al.

Serial No.: 09/249,312

Group: 2821

Lucent Case No.: 117300/HUO 2-8

Filed: February 12, 1999

Examiner: UNASSIGNED

For:

SYSTEM AND METHOD FOR ADJUSTING ANTENNA  
RADIATION IN A WIRELESS NETWORK



L E T T E R

Assistant Commissioner for Patents  
Washington, D.C. 20231

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Sir:

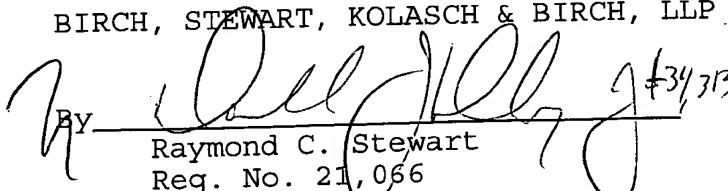
TECHNOLOGY CENTER 2800

Attached hereto are eight (8) sheets of corrected Formal Drawings. Please substitute these corrected drawings for the corresponding nine (9) sheets of drawings on file in the above-identified application. FIG. 5 and FIG. 6 have been combined in a single sheet.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 12-2325 for any additional fee required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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RCS/DEB/slp  
Attachments

FIG. 1

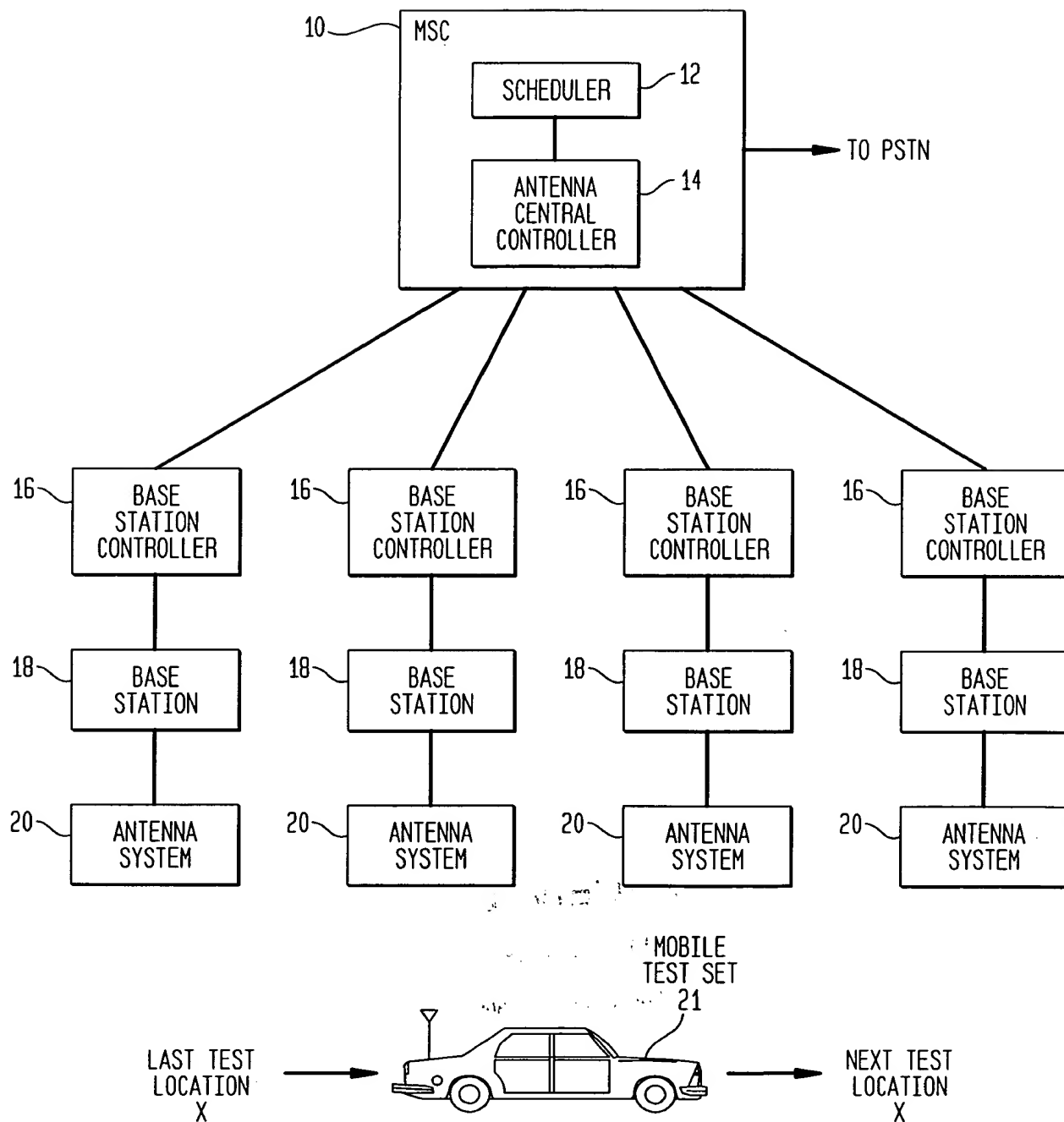


FIG. 2

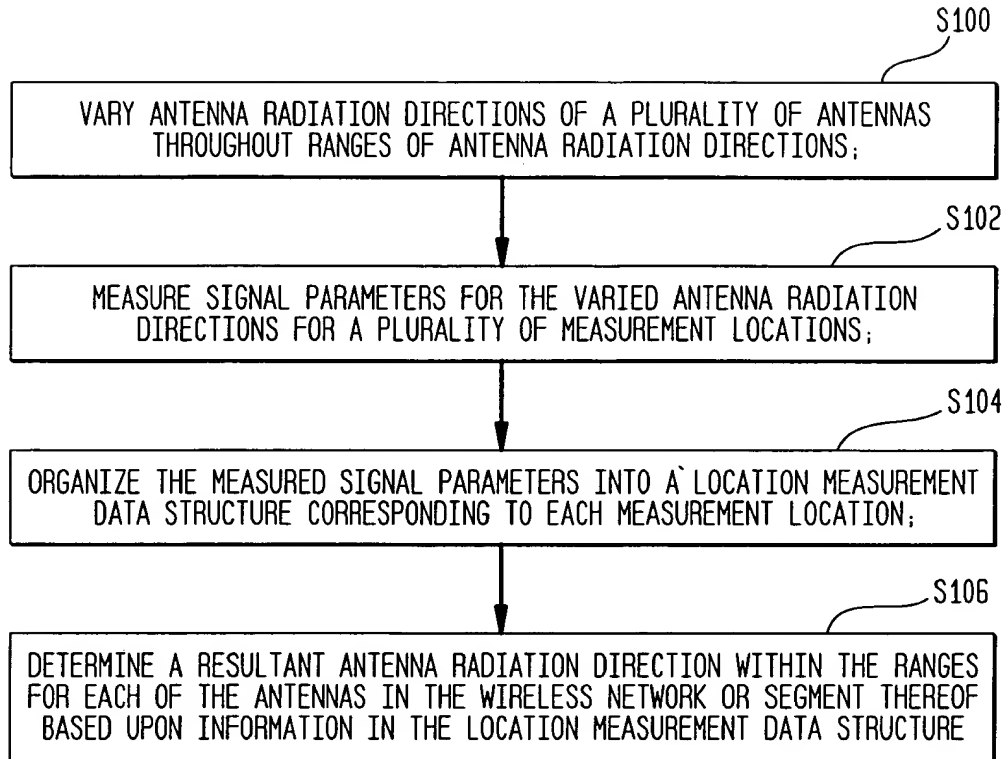


FIG. 3A

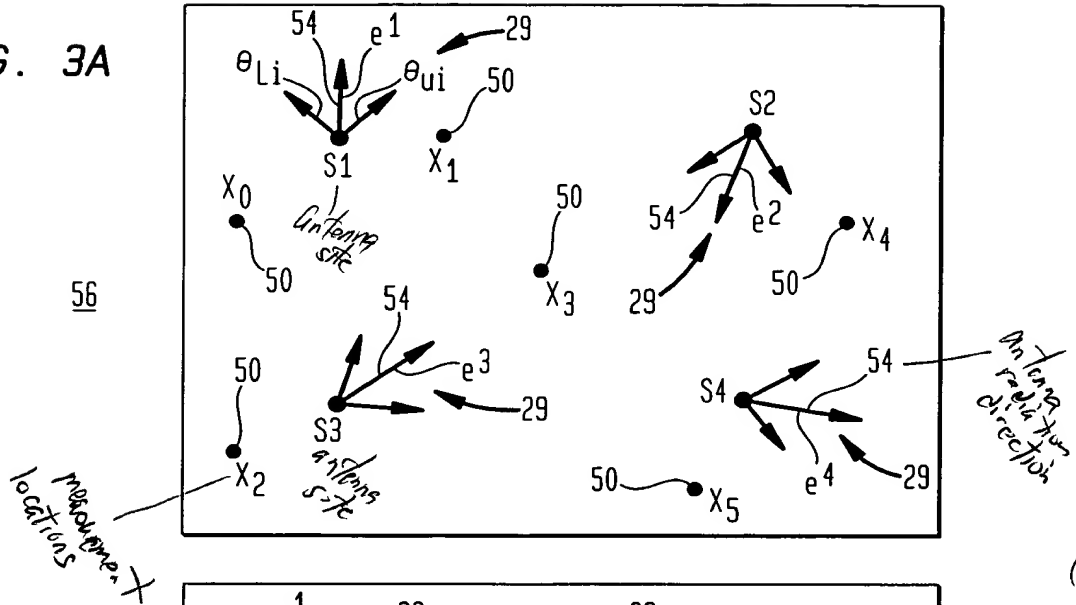


FIG. 3B

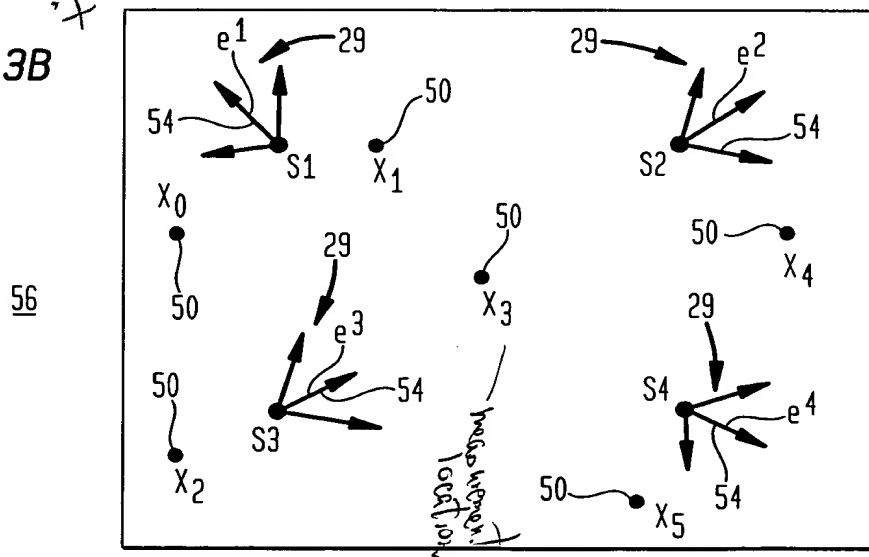
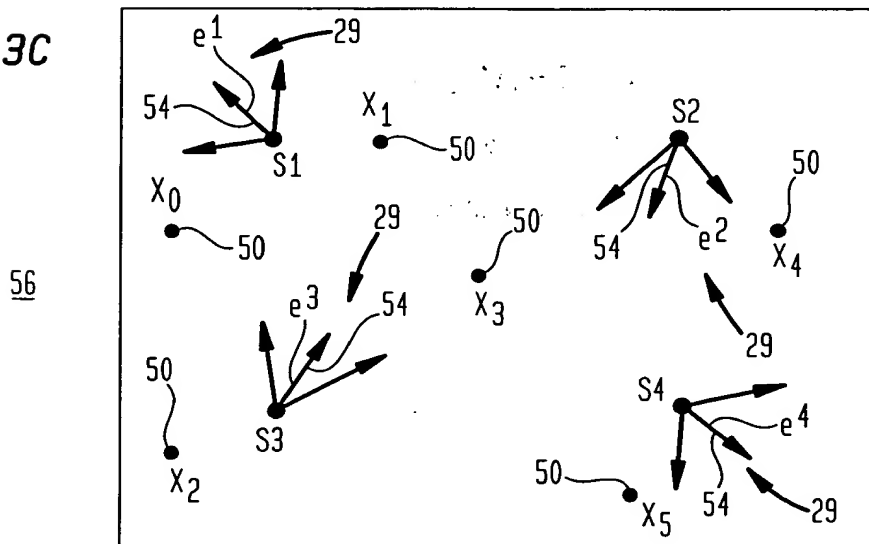
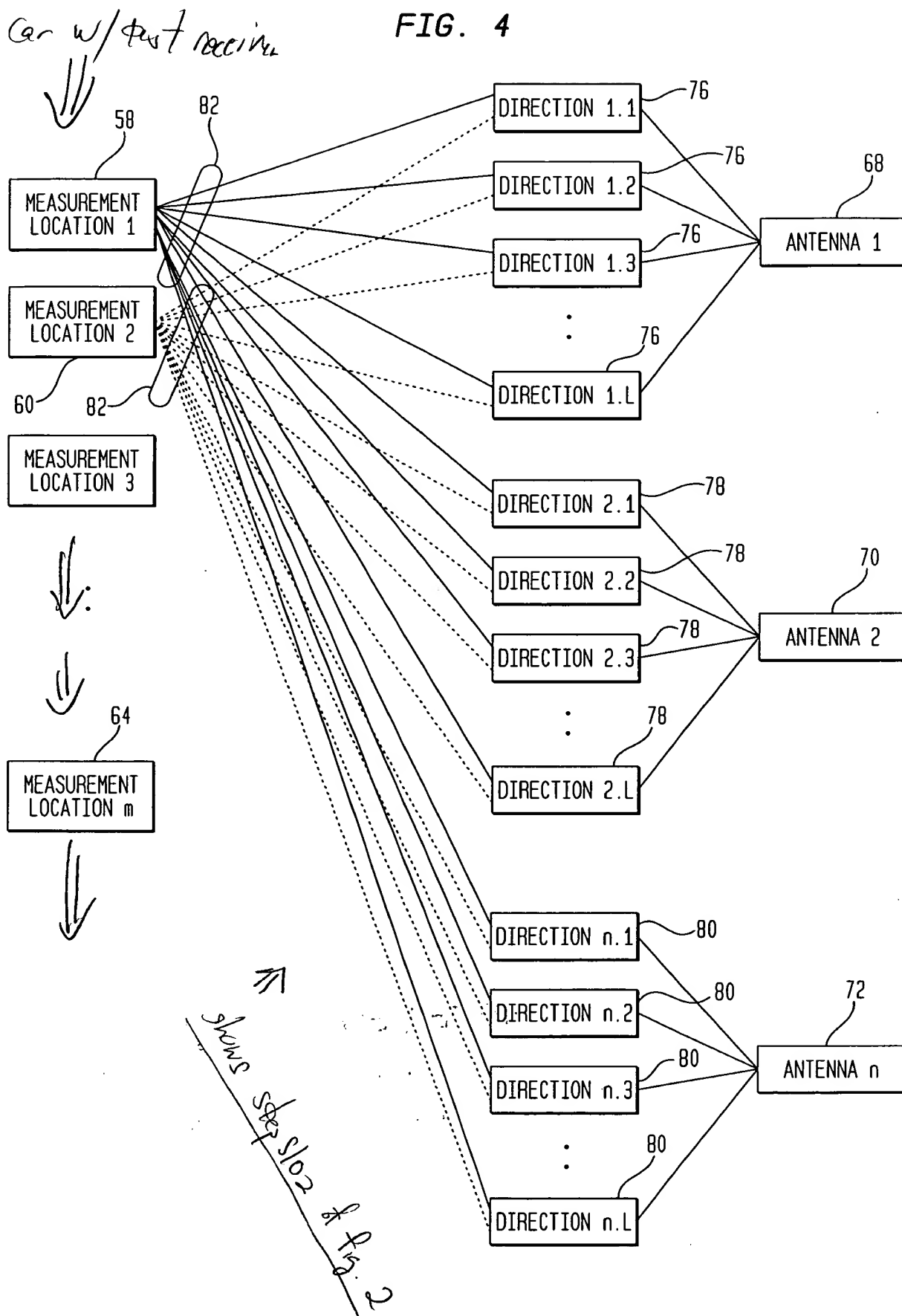


FIG. 3C



Vector for all antenna sites

FIG. 4



**FIG. 5**100

$$\left\{ \begin{array}{cccc} S_1(x, e_1^1) & S_1(x, e_2^1) & \cdots & S_1(x, e_q^1) \\ S_2(x, e_1^2) & S_2(x, e_2^2) & \cdots & S_2(x, e_q^2) \\ \vdots & \vdots & \vdots & \vdots \\ S_n(x, e_1^n) & S_n(x, e_2^n) & \cdots & S_n(x, e_q^n) \end{array} \right\}$$

**FIG. 6**

$$\begin{array}{l} 102 \rightarrow \left\{ \begin{array}{cccc} S_2(x^1, e_1^2) & S_2(x^1, e_2^2) & \cdots & S_2(x^1, e_q^2) \\ \vdots & \vdots & \vdots & \vdots \\ S_n(x^1, e_1^n) & S_n(x^1, e_2^n) & \cdots & S_n(x^1, e_q^n) \end{array} \right\} = \begin{array}{l} \text{FIRST TEST} \\ \text{LOCATION} \\ \text{MEASUREMENT} \\ \text{MATRIX OF} \\ \text{SIGNAL STRENGTH} \\ \text{SERVED BY} \\ \text{ANTENNA } i=1 \end{array} \\ \vdots \\ \left\{ \begin{array}{cccc} S_1(x^m, e_1^1) & S_1(x^m, e_2^1) & \cdots & S_1(x^m, e_q^1) \\ S_2(x^m, e_1^2) & S_2(x^m, e_2^2) & \cdots & S_2(x^m, e_q^2) \\ \vdots & \vdots & \vdots & \vdots \\ S_n(x^m, e_1^n) & S_n(x^m, e_2^n) & \cdots & S_n(x^m, e_q^n) \end{array} \right\} = \begin{array}{l} \text{LAST TEST} \\ \text{LOCATION} \\ \text{MEASUREMENT} \\ \text{MATRIX OF} \\ \text{SIGNAL STRENGTH} \\ \text{SERVED BY} \\ \text{ANTENNA } i=1 \end{array} \\ \\ 104 \rightarrow \left\{ \begin{array}{cccc} N_1(x^1, e_1^1) & N_1(x^1, e_2^1) & \cdots & N_1(x^1, e_q^1) \\ N_2(x^1, e_1^2) & N_2(x^1, e_2^2) & \cdots & N_2(x^1, e_q^2) \\ \vdots & \vdots & \vdots & \vdots \\ N_n(x^1, e_1^n) & N_n(x^1, e_2^n) & \cdots & N_n(x^1, e_q^n) \end{array} \right\} = \begin{array}{l} \text{FIRST TEST} \\ \text{LOCATION} \\ \text{MEASUREMENT} \\ \text{MATRIX OF} \\ \text{BACKGROUND} \\ \text{NOISE} \end{array} \\ \vdots \\ \left\{ \begin{array}{cccc} N_1(x^m, e_1^1) & N_1(x^m, e_2^1) & \cdots & N_1(x^m, e_q^1) \\ N_2(x^m, e_1^2) & N_2(x^m, e_2^2) & \cdots & N_2(x^m, e_q^2) \\ \vdots & \vdots & \vdots & \vdots \\ N_n(x^m, e_1^n) & N_n(x^m, e_2^n) & \cdots & N_n(x^m, e_q^n) \end{array} \right\} = \begin{array}{l} \text{LAST TEST} \\ \text{LOCATION} \\ \text{MEASUREMENT} \\ \text{MATRIX OF} \\ \text{BACKGROUND} \\ \text{NOISE} \end{array} \end{array}$$

FIG. 7

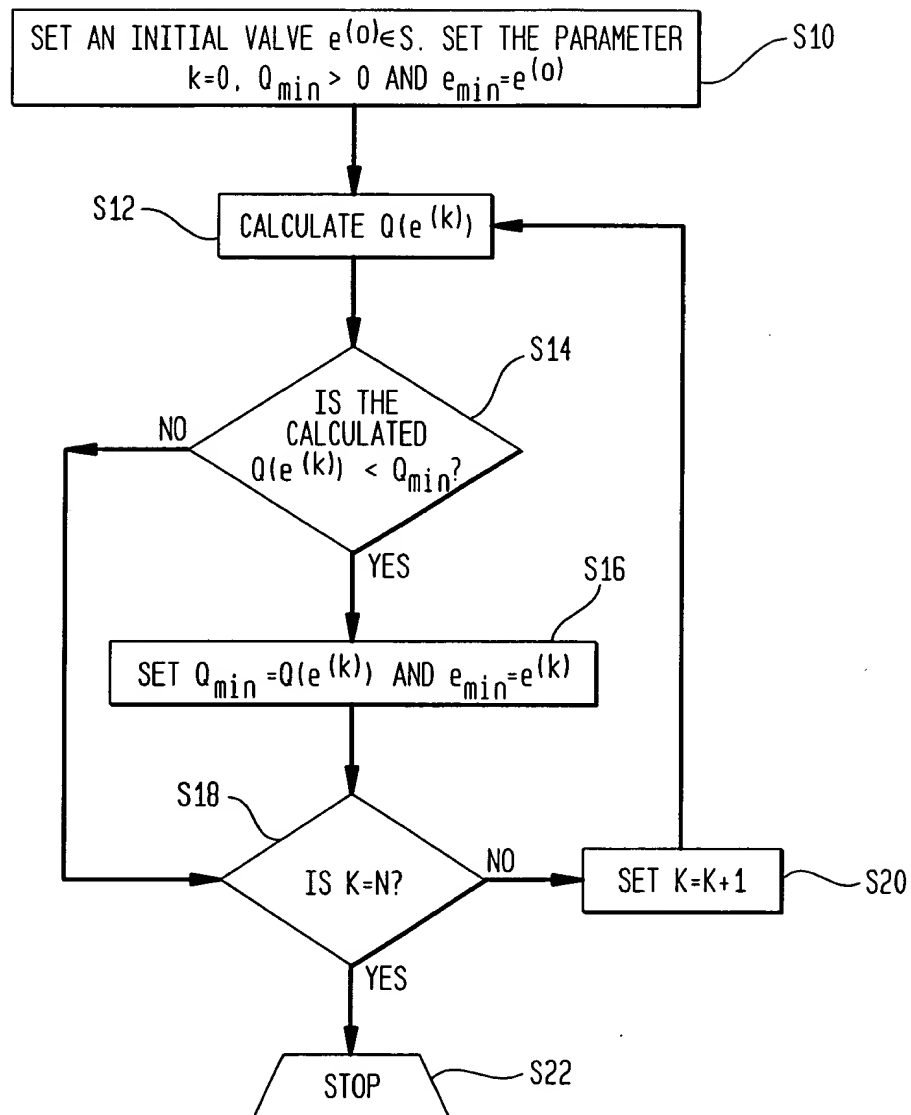


FIG. 8

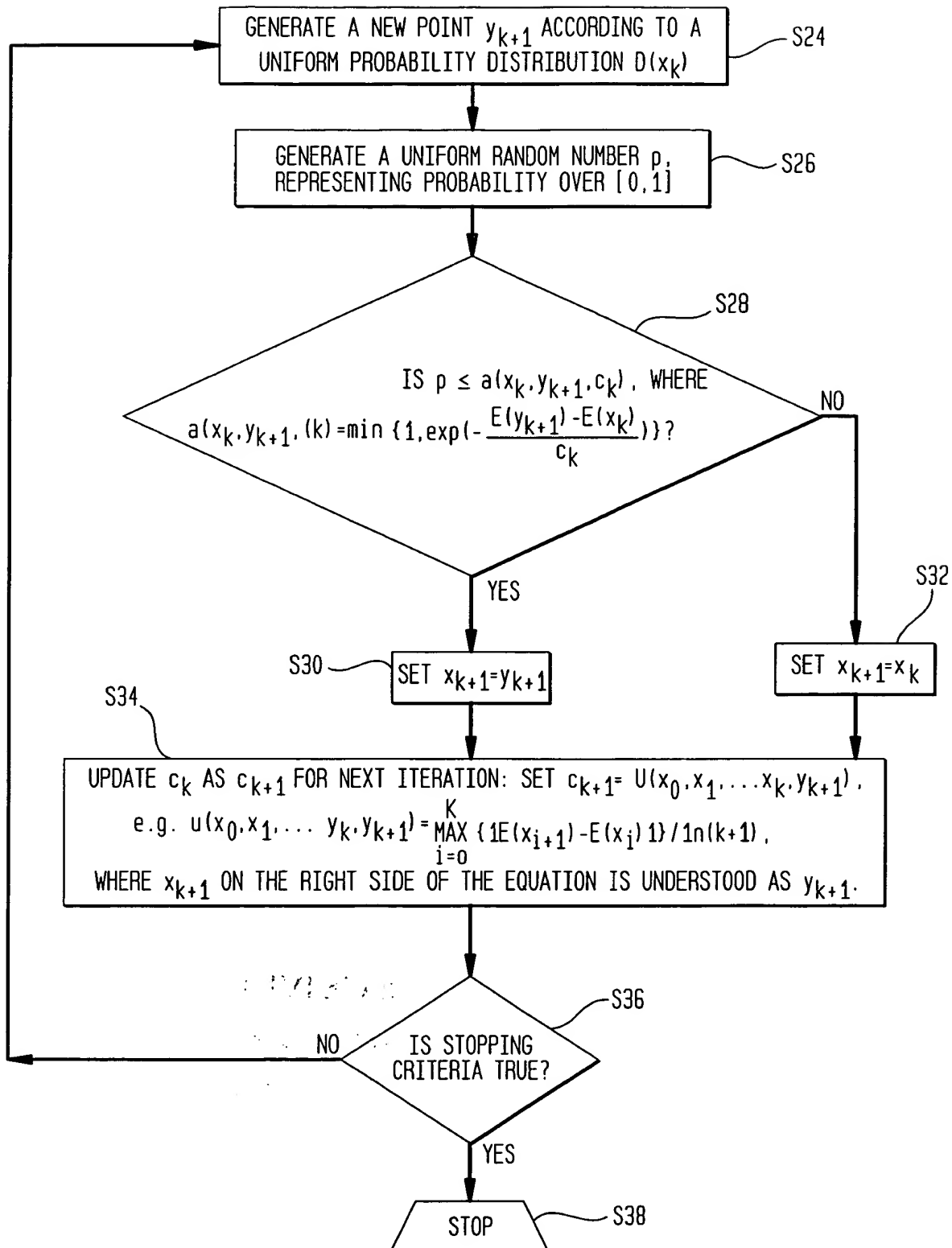




FIG. 9

